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LISA D. NORDSTROM Lead Counsel Inordstrom@idahopower.com

UTILITIES COMMISSION

November 19, 2013

VIA HAND DELIVERY

Jean D. Jewell, Secretary Idaho Public Utilities Commission 472 West Washington Street Boise, Idaho 83702

Re:

Case No. IPC-E-13-15

Idaho Power Company's 2013 Integrated Resource Plan - Idaho Power

Company's Reply Comments

Dear Ms. Jewell:

Enclosed for filing in the above matter are an original and seven (7) copies of Idaho Power Company's Reply Comments.

Sincerely,

Lisa D. Nordstrom

LDN:csb Enclosures LISA D. NORDSTROM (ISB No. 5733)
JENNIFER M. REINHARDT-TESSMER (ISB No. 7432)
Idaho Power Company
1221 West Idaho Street (83702)
P.O. Box 70
Boise, Idaho 83707

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IDAHO PUBLIC
UTILITIES COMMISSION

Telephone: (208) 388-5825 Facsimile: (208) 388-6936 Inordstrom@idahopower.com jreinhardt@idahopower.com

Attorneys for Idaho Power Company

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF IDAHO POWER)	
COMPANY'S 2013 INTEGRATED)	CASE NO. IPC-E-13-15
RESOURCE PLAN)	
)	IDAHO POWER COMPANY'S
)	REPLY COMMENTS
)	

COMES NOW, Idaho Power Company ("Idaho Power" or "Company"), and in accordance with Idaho Public Utilities Commission ("Commission") Order No. 32868, hereby submits these Reply Comments in the above-captioned proceeding. Because the Company's 2013 Integrated Resource Plan ("IRP") has satisfied the requirements of Order No. 22299, Idaho Power urges the Commission to accept the IRP as submitted.

I. BACKGROUND

As required by Commission Order No. 22299 and the Public Utility Commission of Oregon's ("OPUC") Order Nos. 89-507 and 07-002, the Company prepares and files a biennial IRP with both the Commission and the OPUC setting forth how Idaho Power intends to serve the electric requirements of its customers. Idaho Power submitted its

2013 IRP on June 28, 2013. The Commission issued a Notice of Modified Procedure setting a 90-day comment period. Order No. 32868. The Commission Staff ("Staff"), the Snake River Alliance ("SRA"), and the Idaho Conservation League ("ICL"), all submitted comments on or after¹ the November 5, 2013, filing deadline. Idaho Power herein responds to certain issues raised by the commenting parties as well as public comments submitted by Ms. Courtney White ("White") and Mr. Michael Heckler ("Heckler").

II. THE COMMISSION SHOULD ACCEPT THE IRP AS FILED

As an initial matter, Idaho Power notes that all intervening parties providing comments in this case actively participated in the public meetings held as part of the Company's Integrated Resource Plan Advisory Council ("IRPAC") process. As a result, the Company has the ability to respond to the comments in an informed manner as well as an opportunity to work with the commenting parties on a going-forward basis as part of future planning processes. Idaho Power appreciates the valuable input provided through the IRPAC process and carefully considers that information in developing its IRPs.

While the commenting parties provide comments on certain areas of concern as well as recommendations for items to be included in the Company's future IRPs, Idaho Power has met the filing requirements set forth in Order No. 22299. Accordingly, the Commission should accept the 2013 IRP, including the identified preferred portfolio, as filed by Idaho Power.

¹ While the Company does not formally object to the late filings, Idaho Power is concerned that multiple parties filed comments after the 90-day comment deadline established in Order No. 32868. Idaho Power will defer to the Commission's judgment as to whether the late-filed comments should be dismissed pursuant to Rule of Procedure 65.

Notwithstanding, Idaho Power takes this opportunity to respond to comments made as well as provide additional clarification on certain issues. Idaho Power addresses these items below.

A. Coal Study and Evaluation of Coal Resources in the IRP.

1. General Comments on the Coal Study and Jim Bridger Units 3 and 4.

With the exception of Staff, parties submitting comments on Idaho Power's 2013 IRP are generally not supportive of the Coal Unit Environmental Investment Analysis ("Coal Study") or the analysis of coal resources performed in the IRP. Idaho Power stands on the evidentiary record of the technical hearing conducted by the Commission in Case No. IPC-E-13-16 regarding the Company's request for a Certificate of Public Convenience and Necessity for the required emissions controls at the Jim Bridger power plant ("Bridger CPCN case"). However, based on comments submitted regarding the 2013 IRP, Idaho Power responds to the specific issues as follows.

2. Need to Update the Coal Study.

In their Comments, both SRA and ICL raise concerns about the Coal Study either needing to be updated or not accounting for all potential future costs. SRA Comments at 2; ICL Comments at 4. As is always the case, at the time the 2013 IRP was prepared, the most current information available was used in the analysis, and the same is true for the Coal Study. An IRP is prepared every two years to update the forecasts and underlying assumptions. Furthermore, Idaho Power plans to update the Coal Study in the summer of 2014 to inform the analysis that will be contained in Idaho Power's 2015 IRP.

ICL's criticism of the Coal Study and the 2013 IRP not incorporating all of the potential future emissions costs has no merit. The capital cost of all reasonably

anticipated measures required to maintain compliance have been incorporated in both the Coal Study and the 2013 IRP. As Joint Projects Manager Tom Harvey testified in the Bridger CPCN case, "The Coal Study conducted by the Company included the anticipated impacts of other existing, proposed, or expected regulations. These include the Clean Water Act requirements for existing coal-fired power plants; Coal-Combustion Residuals ('CCRs'), National Ambient Air Quality Standards ('NAAQS'), and Mercury and Air Toxic Standards ('MATS')." Case No. IPC-E-13-16, Tr. at 153, II. 11-17. It appears that in ICL's opinion, an absolute worst case scenario should be used regarding future emissions controls. However, as noted by Mr. Harvey, ". . . just because there is a new regulation, it does not mean that the facility is subject to those requirements or isn't already meeting those requirements." *Id.*, Tr. at 190, II. 16-19.

3. Surplus Energy and Not Replacing Coal Capacity.

In both the Bridger CPCN case and in Comments filed regarding the 2013 IRP, ICL claims that replacement energy for retired coal units is unnecessary because Idaho Power has a surplus of energy in terms of the monthly average energy position presented in the IRP. ICL Comments at 3. While it is true that the IRP average monthly energy load and resource balance shows various amounts of surplus energy throughout the IRP planning horizon, monthly average energy needs have never solely driven Idaho Power's need for additional resources. Generation capacity (peak-hour) needs in the summer months for many years now have been larger and shown up earlier than monthly average energy needs throughout the IRP planning horizon. Therefore, retirement of any coal unit without any commensurate replacement capacity would result in Idaho Power not being able to serve customers during the summer peak load season.

4. NV Energy's Future Plans for the North Valmy Power Plant.

In their Comments, both SRA and ICL raise concerns about the future of the North Valmy power plant and its treatment in the 2013 IRP. SRA Comments at 3; ICL Comments at 7. This criticism of the 2013 IRP arises primarily from confusion related to NV Energy's intentions with respect to its 50 percent ownership interest in the plant. In the spring of 2013, NV Energy announced decommissioning plans for two other coal plants (the Reid Gardiner and Navajo coal plants). However, there is currently no planned closure of the two units at the North Valmy power plant. NV Energy currently applies depreciation rates for North Valmy that are based upon end-dates of 2021 for Unit 1 and 2025 for Unit 2. Idaho Power currently uses end-dates of 2031 for Unit 1 and 2035 for Unit 2 in its currently approved depreciation rates. Both NV Energy and Idaho Power review their depreciation rates at differing intervals, as required by their respective state regulatory commissions. It is important to note that these dates are used for the sole purpose of establishing depreciable lives for accounting and ratemaking purposes and do not represent agreed upon decommissioning dates between NV Energy and Idaho Power. Neither company can decommission a unit without the consent of the other partner. Idaho Power is currently working with NV Energy to determine what would be required to establish common depreciation dates for both parties, which would be beneficial in analyzing the future operation of the plant.

In its 2013 IRP, Idaho Power plans on continued operation of the North Valmy plant throughout the entire 20-year planning period and the preferred resource portfolio includes continued operation of Units 1 and 2 at the North Valmy plant. Idaho Power also specifically analyzed retirement of the North Valmy generation facility in resource portfolios 8 and 9 in order to quantify the impact of shutting the units down in 2021 and

2025. Neither of these portfolios performed well from a cost and risk perspective; therefore, neither was selected as the preferred portfolio. These results are consistent with and support the findings of the Coal Study; therefore, the installation of dry sorbent injection at the North Valmy plant is included in the IRP action plan.

5. Carbon Adder Used in the 2013 IRP.

While Staff is supportive of the carbon adder used in the 2013 IRP and Coal Study, ICL is critical of Idaho Power not using the exact values of an independent third-party estimate of carbon adders in the Coal Study and IRP analyses. Staff Comments at 10; ICL Comments at 4.

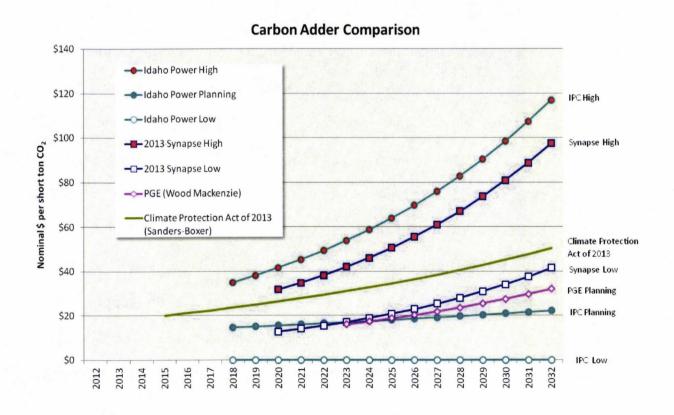
Idaho Power uses credible third-party assessments for the assumptions and forecasts used in the IRP whenever possible. In the case of the carbon adder used for the IRP and Coal Study, Idaho Power relied on the high case estimates provided by Synapse Energy Economics Inc. ("Synapse") in the 2011 Carbon Dioxide Price Forecast and the 2012 Carbon Dioxide Price Forecast² to establish the high case boundary condition analyzed in the IRP. After discussions with the IRPAC and a comparison of other utilities' carbon adder assumptions, the planning or expected case carbon adder used in the 2013 IRP begins in 2018 at a cost of \$14.64 per ton, and is escalated at 3 percent annually.

In regards to the low case carbon adder used for the IRP analyses, ICL is critical of using a zero-cost scenario. While Idaho Power agrees with ICL that a zero-cost scenario is not likely as the low case scenario, it does what it is intended to do in the IRP risk analysis in stressing a boundary condition. In addition, several IRPAC members expressed support of a zero-cost, low case due to the fact that carbon adder

² Synapse Energy Economics, Inc., Cambridge, MA, August 10, 2011, and October 4, 2012, http://www.synapse-energy.com.

assumptions have been used in Idaho Power's IRPs for almost 20 years, and to date no regulations have been put into effect.

In response to criticism of the carbon adder used in Idaho Power's 2013 IRP, in the chart below, the Company presents a comparison of the most current estimates from Synapse,³ Portland General Electric Company's ("PGE") IRP (Wood Mackenzie), and the Climate Protection Act of 2013 proposed by Senator Sanders (I-VT) and Senator Boxer (D-CA). As the chart reflects, Idaho Power's planning case is similar to PGE's planning case prepared by Wood Mackenzie, and slightly lower than the Synapse low case and the estimate provided in the Climate Protection Act of 2013. Idaho Power's high case is higher than the high case identified by Synapse in a recently released study.⁴



³ November 1, 2013, http://www.synapse-energy.com.

⁴ Id.

Idaho Power believes these recent forecasts support the carbon adder used in the 2013 IRP and in the Coal Study. It is also interesting to note that while ICL believes Idaho Power should have used the exact values forecast by an independent third party for the IRP carbon adder scenarios, ICL does not support the use of an independent third party to assess the achievable demand-side management ("DSM") potential in the IRP and claims the IRP contains a "hobbled assessment of demand-side resources." ICL Comments at 2.

B. Demand-Side Management.

1. 2013 Energy Efficiency Potential Study.

For the 2013 IRP, Idaho Power retained EnerNOC Utility Solutions Consulting ("EnerNoc") to conduct a comprehensive 20-year study of the Company's energy efficiency potential. The study resulted in a forecast of achievable energy efficiency potential that was fully incorporated into the IRP planning process prior to the consideration of any new supply-side resources, which resulted in decreased forecast customer loads across all customer classes. The total energy efficiency forecast, including the EnerNOC achievable potential plus the additional forecast amount to account for future savings from special contracts, totaled 261 average megawatts ("aMW") over the 20-year IRP planning period.

2. Idaho Power Funding of NEEA.

SRA expresses concern that Idaho Power may reduce its support of the Northwest Energy Efficiency Alliance ("NEEA"). SRA Comments at 5. The Company's critical evaluation of its continued relationship with NEEA is reasonable and reflects the

⁵ This characterization appears in the heading.

⁶ The 2013 Energy Efficiency Potential Study was published in *Supplement 2: Evaluation* of the *Demand-side Management 2012 Annual Report* filed in Case No. IPC-E-13-08 at 429-545.

Company's commitment to obtain cost-effective energy efficiency solutions for its customers. NEEA savings have accounted for more than 10 percent of the Company's energy efficiency savings since 2010. However, these savings have not come without costs. Indeed, since 2002, NEEA energy efficiency savings have increased by 37 percent while NEEA funding from utilities like Idaho Power has increased 141 percent.

As one of the original funding partners of NEEA in 1997, Idaho Power and its customers have historically found value in a relationship with NEEA. NEEA was created at a time when Idaho Power began to rebuild its DSM portfolio offerings and NEEA has contributed to the increased awareness and adoption of DSM in the region. Over the past 15 years, Idaho Power has continued to build extensive programs and acquired significant energy efficiency savings through customer education and program participation. Idaho Power has gained expertise with program design, delivery, and evaluation and a good understanding of its customers' energy needs. Idaho Power has a solid understanding of the marketplace and works directly with its customers, as well as the Energy Efficiency Advisory Group, to identify and implement cost-effective solutions that provide the best value for customers.

During 2009, the year leading up to NEEA's current funding cycle, Idaho Power expressed its desire for NEEA to alter how NEEA designed its services and corresponding funding in the 2010 to 2014 business plan. Idaho Power sought to direct its funding toward those activities it believed would bring the most value to its customers. There were some aspects in this funding cycle that Idaho Power supported, such as regional research, especially with emerging technologies; regional training; and NEEA's "upstream" work with manufacturers. Idaho Power communicated to NEEA its preference for an alternative funding model that would allow Idaho Power's funds to be

directed toward the costs of these supported activities. Idaho Power continues to seek a funding model that maximizes the investment of customer funds for DSM. In the meantime, Idaho Power provided advance notice of its intention to not pursue a commitment with NEEA for the next funding cycle of 2015-2019. Idaho Power will continue to participate in the current 2010-2014 funding cycle and actively participate as currently committed.

3. Demand-Side Management Comments.

Staff expresses concern that the IRP load and resource balance excludes new residential energy efficiency savings in 2013 and 2014. Staff Comments at 7. Although the Company acknowledges that in the printed version of the load and resource balance tables as well as the table on page 82 of Appendix C that the energy efficiency savings potential for the residential sector appear to be zero, in fact, the potential is less than one aMW for 2013 and 2014. The actual potential for 2013 and 2014 for the residential sector is 0.122 aMW and 0.244 aMW, respectively. When rounded, energy efficiency savings potential appear to be zero; however, they are included in the load and resource balance calculations.

Staff recommends that Idaho Power increase its efforts to improve customer participation rates to bridge the disparity between achievable and economic potential savings. Staff Comments at 7. As previously noted, Idaho Power's third-party consultant EnerNoc determined the achievable energy efficiency potential for Idaho Power's service territory. The total energy efficiency achievable potential plus the additional forecast amount to account for future savings from special contracts totaled 261 aMW over the 20-year IRP planning period. Idaho Power is committed to pursue all cost-effective energy efficiency. In alignment with this commitment, the Company does

not view the achievable potential as a "ceiling" for the pursuit of energy efficiency and will continue to pursue energy efficiency beyond the achievable potential when possible. Idaho Power believes the energy efficiency achievable potential, as determined by a reputable third-party consultant, is reasonable to include in the IRP for planning purposes.

Staff comments that the IRP failed to address how future DSM savings will be acquired and recommends including details regarding energy efficiency acquisition in the IRP's action plan section. Staff Comments at 7. Traditionally, energy efficiency acquisition has not been included in the action plan section because the pursuit of energy efficiency savings is an ongoing activity at Idaho Power and is explicitly included in the load and resource balance analysis. The 2013 IRP Appendix B, *Demand-Side Management 2012 Annual Report*, identifies the Company's DSM programs and activities and the Energy Efficiency Potential Study, which was filed with the Company's *Demand-Side Management 2012 Annual Report*, *Supplement 2: Evaluation*, identifies the achievable energy efficiency potential by sector and by end use.⁷

ICL claims Idaho Power does not give equal and balanced treatment to demand-side and supply-side resources and that "For demand-side resources, Idaho Power assumes the Company will essentially maintain current levels." ICL Comments at 2. ICL's Comments are not consistent with the data presented in Table 4.1 on page 43 of the 2013 IRP which show increasing amounts of energy efficiency being added throughout the 20-year planning period. Additionally, Idaho Power disagrees with ICL's statement that demand-side resources are not given equal and balanced treatment to supply-side resources. The Company includes all achievable energy efficiency

⁷ The 2013 Energy Efficiency Potential Study was published in *Supplement 2: Evaluation* of the *Demand-side Management 2012 Annual Report* filed in Case No. IPC-E-13-08 at 429-545.

potential, as determined by a third party in the load and resource balance analysis prior to the consideration of any supply-side resources.

Public comments from Ms. Courtney White claim that "Energy efficiency was not adequately considered as a resource." White Comments at 7. Idaho Power believes that Ms. White's opinion reflects a lack of understanding regarding how energy efficiency programs are evaluated in the IRP and that all achievable, cost-effective energy efficiency programs are included in the IRP before supply-side resources are evaluated. For this reason, energy efficiency programs were not included a second time in the Resource Alternative Analysis, as stated in Ms. White's Comments.

C. Transmission Projects.

1. Delayed On-Line Date for the Boardman to Hemingway Project.

Staff and SRA express concerns over Idaho Power's recently announced delay of the expected on-line date for the Boardman to Hemingway project ("B2H") from 2018 to 2020. Staff Comments at 11; SRA Comments at 2. At the time the 2013 IRP was being prepared, the expected on-line date for B2H was in 2018 and, as shown in the preferred portfolio, Idaho Power plans to utilize demand response programs to meet summertime deficits until the B2H project is completed. Idaho Power believes the recently approved settlement agreement regarding Idaho Power's demand response programs (Case No. IPC-E-13-14) will provide the flexibility to increase or decrease the amount of demand response available as needed. Order No. 32923. This flexibility is an advantage demand response programs provide that a supply-side resource cannot. Once a supply-side resource is built, it exists for the life of the plant.

Based on Idaho Power's latest load forecast, sufficient demand response program capacity exists to meet peak-hour deficits through the summer of 2020. This

coming summer, Idaho Power will begin the process of preparing the 2015 IRP where both the current status of the B2H project and the forecast amount of demand response programs will be evaluated.

2. Need for the Gateway West Project.

In its Comments, Staff requests that Idaho Power provide a broader discussion of the Gateway West project and analysis in the next IRP update. Staff Comments at 11. SRA questions the need for Gateway West. SRA Comments at 4. Idaho Power currently has no additional available transmission capacity from the Midpoint substation located in southern Idaho to the Company's primary load center in Boise and the Treasure Valley area. Over time, the Company has scaled back its participation in Gateway West to only this portion of the much larger total project. The Gateway West project will provide additional capacity along this path, allowing Idaho Power to move additional amounts of energy across the electrical system, especially during times when wind generation is at high levels. In addition, increased capacity on this path will provide options for siting future supply-side resources in southern Idaho.

Due to the uncertainty of the amount of time it takes to permit large transmission projects, Idaho Power believes it is prudent to continue participating in the permitting process for Gateway West. If Idaho Power were to not participate in this project, it would be very difficult, if not impossible, for Idaho Power to permit and construct new transmission capacity along this path in the future. Having partners in the project is also beneficial as it helps to reduce the overall cost.

On November 14, 2013, the Bureau of Land Management ("BLM") released the Record of Decision ("ROD") for the project and is deferring a decision on segments 8 and 9, which are the segments that connect the Midpoint substation and the Cedar Hill

substation to the Hemingway substation.⁸ This deferral is primarily due to routing issues across the Snake River Birds of Prey National Conservation Area. Idaho Power will continue working with the BLM to complete the ROD for these two segments. The Boise BLM district office will lead this effort, initiating siting discussions with cooperating agencies and stakeholders to determine whether or not new information and/or modifications to the alternatives analyzed in the Final Environmental Impact Statement will be required. If so, BLM will prepare additional environmental analysis for public review and comment. Should new plan amendments be required as part of the environmental analysis, then there would be a protest period, a 60-day Governor's consistency review, and then the BLM will prepare a separate ROD to approve the plan amendments. As stated in section 1.8.1 of the current ROD, the BLM estimates the timeframe for a decision will take one to two years.

D. <u>Distributed and Solar Photovoltaic ("PV")</u> Generation.

1. PV Panel Orientation.

SRA, ICL, and Ms. White express concern in their Comments that the IRP's analysis of solar PV resources is focused on systems with a due-south orientation. SRA Comments at 5; ICL Comments at 6; White Comments at 7. Idaho Power acknowledges the effect of a southwest orientation and includes in the 2013 IRP Technical Appendix a comparison of PV generation profiles for Boise, Idaho, installations oriented to the south and to the southwest beginning on page 93. Timing of generation from the southwest-oriented installations coincides better with peak customer demand. However, because Idaho Power experiences peak customer demand as late as or after 6:00 p.m. (MDT), installations with a southwest orientation

⁸ Bureau of Land Management, http://www.wy.blm.gov/nepa/cfodocs/gateway_west/. November 14, 2013.

still require large amounts of nameplate capacity to contribute significantly to meeting peak demand. The following is taken directly from page 95 of the Technical Appendix:

The tables indicate the southwest orientation in Boise has a 25.7 percent capacity factor from 6:00 to 7:00 pm in July and the south orientation has a 1.5 percent capacity factor during the same hour in July. Even though the southwestern exposure has a considerably greater capacity factor in late afternoon in July, the southwestern exposure capacity factor is still only 26 percent during the 6:00 to 7:00 pm hour in July. To meet a 100 MW capacity deficit during the 6:00 to 7:00 pm hour in July would require almost 400 MW of installed nameplate solar PV according to the NREL data. It is likely that the 90th percentile exceedance criteria used by Idaho Power for capacity resource planning would further increase the quantity of solar generation needed to address a capacity deficit.

Idaho Power recognizes that solar as an energy resource comes with options, certainly more options than wind. An analysis exploring solar as an energy alternative must address numerous considerations, such as tracking systems (one- or two-axis), resource orientation of non-tracking systems, and materials (c-Si, thin film, etc.). Among the myriad of options, for this IRP, Idaho Power chose to focus on non-tracking systems with a due-south orientation because a vast majority of the existing solar PV on Idaho Power's system comes from either the net metering tariff in Idaho or the Oregon Solar Photovoltaic Volumetric Incentive Program. Under both programs customers are economically incented to orient PV panels to the south in order to maximize overall annual production.

2. Cost Estimate for Solar PV Resources.

Staff, SRA, ICL, Ms. White, and Mr. Heckler all provided comments on aspects of the cost estimate for solar PV resources used in the 2013 IRP. Staff Comments at 9, SRA Comments at 5; ICL comments at 6; White Comments at 7; Heckler Comments at

5. For the 2013 IRP resource cost estimates, Idaho Power relied on a National Renewable Energy Laboratory ("NREL") report published in February 2012.⁹ Idaho Power shares the views expressed in comments with respect to the downward cost trend of solar PV, and the IRP accounts for this trend while the cost of all other resource types are escalated at 3 percent annually. There has also been some confusion in the comments filed because the resource costs from the NREL report were converted to 2013 dollars for use in the IRP.

The Company views the NREL cost report as an appropriate source for resource cost data for the 2013 IRP as it was the best available information at the time cost estimates had to be finalized for the IRP. Further, the accuracy of the NREL cost data for distributed solar installations was confirmed by the Public Utility Commission of Oregon's January 2013 legislative report on the Oregon Solar Photovoltaic Volumetric Incentive Program.¹⁰ Summary statistics for Idaho Power customers for 25 small systems installed in 2010-2011 show average costs of \$5.65 per watt (dc); these costs align well with the IRP's cost estimate of \$5,610 per kilowatt.

The other issue raised in comments regarding the cost of solar PV is whether the IRP cost estimate for distributed solar PV should account for a lower capital cost because under the net metering tariff, participants pay the capital cost. The IRP has always evaluated resource costs on a total resource cost basis. It is Idaho Power's view that this is appropriate because ultimately all costs will come back to customers. Decisions to self-build a resource or to issue a request for proposals for a long-term

⁹ Cost and Performance Data for Power Generation Technologies, February 2012. Prepared for NREL by Black and Veatch, http://bv.com/docs/reports-studies/nrel-cost-report.pdf.

¹⁰ Oregon Solar Photovoltaic Volumetric Incentive Program, January 1, 2013. Public Utility Commission of Oregon, http://www.puc.state.or.us/docs/010213SolarPilotProgramReport.pdf.

power purchase agreement with an independent power producer ("IPP") have always been made at the time a resource needs to be built. If Idaho Power builds a resource, the costs get put into rates and customers pay for the capital cost plus a rate of return over time. If an IPP builds a generation facility and Idaho Power purchases the generation, the rates paid in the contract reflect the capital cost the IPP expended to build the project plus a profit margin. In the specific case of the net metering tariff, participants benefit by not having to pay their full share of the fixed costs associated with providing electric service. In all these cases, Idaho Power's customers end up paying for the capital cost of the resource regardless of who builds it or how it is acquired; therefore, it is appropriate to evaluate all resource alternatives in the IRP on a total cost basis.

Idaho Power believes it would be inappropriate to artificially ignore any portion of the capital cost of any resource type because it creates a situation where resources are not being compared on an "apples to apples" basis. While Staff is supportive of considering only utility costs, it also points out that under that logic, Idaho Power "should spend no money on resources and acquire all the distributed solar it can." Staff Comments at 9. Staff goes on to point out that Idaho Power currently does this under the net metering tariff and, to date, it has resulted in less than 3 megawatts ("MW") of nameplate generation. Idaho Power agrees with Staff and it is the Company's opinion that it would be irresponsible planning to rely on a resource of utility scale being built by others simply because the capital cost was ignored in the IRP analysis.

For the 2015 IRP, Staff recommends that Idaho Power investigate whether incentive programs could realistically generate enough interest in expanding distributed solar PV installations in sufficient capacity (10 MW and above) to warrant including

distributed solar PV as a resource alternative. Staff Comments at 9. Idaho Power has already been considering options for possible distributed generation programs and intends to include an analysis/evaluation as part of the 2015 IRP.

E. Other Issues.

1. Use of the U.S. Energy Information Administration ("EIA") Nominal Gas Price Forecast.

Staff recommends that Idaho Power use the EIA nominal gas price forecast rather than starting with the version that is published in 2010 dollars and converting it to nominal dollars. Staff Comments at 5. Idaho Power is agreeable to using the EIA nominal forecast, but would propose making this change starting with the 2015 IRP. All of the analyses performed in the 2013 IRP were performed with the 2010 real dollar gas price as the basis. Because the AURORA model and all of its inputs are also used in determining negotiated Public Utility Regulatory Policies Act of 1978 ("PURPA") rates, for consistency, the Company believes it makes sense to make this change at the beginning of an IRP cycle.

2. Energy Imbalance Market.

ICL is critical of the explanation provided in the IRP of the regional investigation into an energy imbalance market of which Idaho Power is only one of over 20 participants. In its Comments, ICL states, ". . . the IRP makes no effort to explain how Idaho Power will pursue this opportunity, other than participation in some ill defined discussions." ICL Comments at 7. Idaho Power stands behind the following explanation provided in the IRP:

In May 2012, the Northwest Power Pool (NWPP) initiated a study of an energy imbalance market (EIM) for the NWPP region. The 2012 study extended earlier work by WECC and various utility commissions. The NWPP study focused on

issues related to hydroelectric resources in the Northwest. The NWPP analyzed the dispatch costs of the region to capture the diversity of load and wind variations that occur during the operating hour. In addition to the analysis, the NWPP study considered a mathematical simulation of the Northwest EIM.

Idaho Power was 1 of over 20 entities supporting the study. The study found that an EIM would reduce the dispatch costs for the NWPP by about 3 percent when applied to the observed annual thermal dispatch cost of about \$3 billion and resulted in savings between \$40 and \$120 million depending on the specific study assumptions. While the NWPP study found a positive benefit to cost ratio, many institutional issues remain before an EIM can be implemented in the Pacific Northwest.

IRP at 17.

Idaho Power continues to participate in the regional process to determine the benefits, costs, and feasibility of implementing an EIM within the NWPP. As stated in the IRP, there are many unresolved issues such as governance, which entities will be participants, and other technical details that must be agreed upon by the participants. Idaho Power has little to no control over these issues that must be addressed before an EIM can be implemented.

3. Peak-Hour Planning Criteria.

Staff suggests Idaho Power should consider adopting less conservative peak-hour planning criteria as a way to delay the need to build a new resource for a low probability event. Staff Comments at 5. Current peak-hour planning criteria are 90th percentile water conditions (one year in ten) and 95th percentile peak load (one year in 20). The appropriateness of Idaho Power's planning criteria can be assessed by examining the capacity planning margin calculations shown in Chapter 9 of the 2013

IRP.¹¹ The capacity planning margin values are calculated using the median or 50th percentile peak-hour load forecast. The capacity planning margin of the preferred resource portfolio varies from a high of 23 percent just after the increased import capacity of B2H is added to Idaho Power's system in 2018 to a low of 13 percent at the end of the planning period in 2032.

On July 1, 2013, Idaho Power's peak load reached 3,402 MW, which set a new system peak load record and exceeded the previous record of 3,245 MW by 157 MW, which was set in the summer of 2012. On the next day, another new record was set when system peak load reached 3,407 MW. The poor water conditions experienced in Idaho in 2013 are slightly worse than 90th percentile and the peak-hour load on July 1 and 2 this past summer was very close to 95th percentile.

The conservative nature of the peak-hour planning criteria is designed to provide necessary operating reserves, but does not account for other contingencies related to transmission, such as loop flow or the impact of losing transmission due to range fires or other localized weather events. Both of these issues have the potential to severely impact Idaho Power's ability to serve customers under peak load conditions; therefore, the Company opposes any change to the current planning criteria.

4. First Capacity Deficit Year.

SRA and ICL both comment on a perceived discrepancy between the IRP and Idaho Power's filing in Case No. IPC-E-13-21 regarding the Company's first capacity deficit year. SRA Comments at 4; ICL Comments at 2. Figure 5.5 on page 61 of the IRP shows Idaho Power's first capacity deficit year being in 2016 without accounting for

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¹¹ 2013 IRP, Chapter 9, pp. 107-108.

any of Idaho Power's demand response programs or other new resources. If demand response programs are included, this chart would show the first deficit year being 2023.

In order to comply with the final order from the Idaho PURPA case (Case No. GNR-E-11-03, Order No. 32871), on November 4, 2013, Idaho Power filed an application in Case No. IPC-E-13-21 to update information that influences the first deficit year and other inputs used to determine negotiated PURPA rates. The updated information provided included the load forecast, natural gas price forecast, and any changes in PURPA or other long-term power purchase agreements. With these new inputs, the first capacity deficit year changed to 2021. 12

5. Wind Integration Study.

ICL is critical of Idaho Power's wind integration study and comments that "The wind integration study is irretrievably flawed." ICL Comments at 6. ICL would like Idaho Power to include in the analysis technology and market conditions that do not yet exist. For the wind integration study, ICL wants Idaho Power to speculate on the existence of an Energy Imbalance Market, the use of 15 minute markets, and future improvements in wind forecasting. While the IRP looks forward 20 years, the wind integration study is designed to evaluate the cost of integrating wind today under current conditions. As ICL points out, others are performing studies to evaluate the potential benefits of these advances. However, Idaho Power does not believe it is appropriate to account for things that do not currently exist because the results of the study are used to determine wind integration charges assigned to PURPA contracts. Idaho Power will update the wind integration study if and when these advances actually happen, or when other

¹² Case No. IPC-E-13-21, Application at 4.

material changes occur that would influence the determination of the cost to integrate wind resources.

6. Dynamic Pricing Programs.

Staff recommends that the Company investigate dynamic pricing options, enrollment strategies, and potential savings for inclusion in the 2015 IRP. Staff Comments at 8. Idaho Power has had dynamic pricing plan offerings including time of day and seasonal pricing for most customer sectors since approximately 2004. Currently, Idaho Power is conducting a study to determine customer behavior and revenue impact of the residential time-of-day pilot plan. The Company will continue to evaluate dynamic pricing options for customers going forward to determine the appropriate time for implementation.

7. Shoshone Falls Upgrade Project.

In its Comments, SRA raises concern over the need for the Shoshone Falls Upgrade Project. SRA Comments at 5. SRA is correct in its Comments that the upgrade of the project would result in increased generation mostly during months when Idaho Power has surplus energy, and provide little summertime capacity. The benefit of the upgrade project has always been the value of the surplus sales into the market, which results in lower overall power supply costs, and the value associated with generation from a non-CO₂ emitting resource. With the decrease in market prices seen over the past few years, the benefits of the upgrade project have deteriorated.

Idaho Power has continued to analyze the project, and it is still marginally beneficial. The Federal Energy Regulatory Commission license amendment requires the project to be completed in 2017, which is when it is shown to come on-line in the IRP. Idaho Power is currently evaluating the possibility of requesting a time extension

to the license amendment. In the meantime, Idaho Power is moving ahead with the reconstruction of the spillway structure which is necessary due to the deteriorated condition of the existing spillway. Reconstruction of the spillway is expected to start in the spring of 2014.

8. Storage Technologies.

Public comments from Ms. White state the IRP process did not incorporate the value of projected improvements in storage technology. White Comments at 5. As part of every IRP, and between IRPs, Idaho Power investigates numerous storage technologies, their stage of development, and projected costs. To date, none of the storage technologies has proven to be cost effective. Pumped storage in particular is a storage technology that Idaho Power follows closely. The evaluation of pumped storage in the 2013 IRP indicates a levelized cost of energy of \$239 per megawatt-hour, or 23.9 cents per kilowatt-hour.¹³

9. Peak-Hour Capacity Factor.

Ms. White suggests that the IRP Resource Alternatives Analysis and other analyses in the IRP are flawed because peak-hour capacity factors were not used for all resource types. White Comments at 5. Ms. White specifically states, ". . . the risk that the sun doesn't shine translates into a cost in the IRP's comparison of solar to alternative resources. However, the cost of risks associated with disrupted operation of the Bridger coal facilities is not integrated into the cost of continuing to rely on these alternatives." White Comments at 5.

Ms. White's comments are simply not true. For all analyses in the IRP, thermal resources have a forced outage rate applied as part of determining the peak-hour

¹³ 2013 IRP, Figure 5.8, 30-year levelized cost of production at 67.

capacity factor for the resource. For analysis purposes, the forced outage rates applied to coal plants, combined-cycle and simple-cycle combustion turbines, and combined heat and power typically range from 5 to 8 percent, which results in peak-hour capacity factors of 92 to 95 percent.¹⁴

10. IRP Advisory Council Schedule and Process.

Mr. Heckler proposes changing the schedule of when and how certain topics are presented at IRPAC meetings as well as other suggestions to improve the public process. Heckler Comments at 2. Idaho Power believes several of Mr. Heckler's suggestions have merit and prior to starting the 2015 IRP, members of the IRP planning team will meet with Mr. Heckler to discuss his suggestions and determine what can be feasibly implemented.

III. CONCLUSION

Idaho Power appreciates the comments submitted by interested parties in this case as well as the opportunity to address those comments. Because the Company's 2013 IRP filing has met the requirements set forth in Order No. 22299, Idaho Power requests the Commission issue an order accepting the Company's 2013 IRP as filed.

DATED at Boise, Idaho, this 19th day of November 2013.

LISA D. NORDSTROM

Attorney for Idaho Power Company

¹⁴ 2013 IRP, Table 7.1, "Resource Alternatives to Achieve 200 MW of Peak-Hour Contribution in 2018" at 84.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on this 19th day of November 2013 I served a true and correct copy of IDAHO POWER COMPANY'S REPLY COMMENTS upon the following named parties by the method indicated below, and addressed to the following:

Commission Staff Karl Klein Deputy Attorney General Idaho Public Utilities Commission 472 West Washington (83702) P.O. Box 83720 Boise, Idaho 83720-0074		
Idaho Conservation League Benjamin J. Otto Idaho Conservation League 710 North Sixth Street Boise, Idaho 83702		
ELECTRONIC SERVICE ONLY Snake River Alliance Ken Miller, Clean Energy Program Director Snake River Alliance P.O. Box 1731 Boise, Idaho 83701		
J.R. Simplot Company Peter J. Richardson RICHARDSON ADAMS, PLLC 515 North 27 th Street Boise, Idaho 83702	Hand DeliveredX_ U.S. MailOvernight MailFAXX_ Emailpeter@richardsonadams.com	
Dr. Don Reading 6070 Hill Road Boise, Idaho 83703	Hand DeliveredX_U.S. MailOvernight MailFAXX_Email_dreading@mindspring.com	
ELECTRONIC SERVICE ONLY Renewable Energy Coalition Thomas H. Nelson P.O. Box 1211 Welches, Oregon 97067	Hand DeliveredU.S. MailOvernight MailFAX _X_Email_nelson@thnelson.com	

ELECTRONIC SERVICE ONLY

John Lowe, Director Renewable Energy Coalition 12050 SW Tremont Street Portland, Oregon 97225

ELECTRONIC SERVICE ONLY

Nancy Esteb, Ph.D. P.O. Box 490 Carlsborg, Washington 98324

Hand Delivered
U.S. Mail
Overnight Mail
FAX
X Email <u>iravenesanmarcos@yahoo.com</u>
Hand Delivered
U.S. Mail
Overnight Mail
FAX
X Fmail betseesteb@gwest net

Christa Bearry, Legal Assistant